

REMARKS

Election

Applicant confirms election of group I, claims 18 to 30. The non-elected claims have here been canceled.

Claims indicated allowable

Claims 27-29 have been indicated allowable if drafted in independent form. The present amendment does this, and these claims are therefore believed to be allowable.

This claim revision increases the number of independent claims to five. The check submitted herewith includes the amount of \$172.00 for the fee for two extra independent claims.

Double patenting

All claims have been rejected on provisional double-patenting grounds based on copending application 10/045,339. Applicant is taking steps to confirm that both applications are owned by the same entity, and will then submit a terminal disclaimer to overcome this rejection.

Rejections

Claims 18 to 20 and 30 were rejected as unpatentable under § 102 based on Ishida et. al.

Claims 18 to 26 and 30 were rejected as unpatentable over WO 98/03441.

Claim 26 has now been revised to independent form, incorporating the language of claims 18 and 22, and reconsideration of the rejection thereof based on WO 98/03441 is respectfully requested. Claim 18 has been cancelled, and all other dependent claims amended to depend from Claim 26.

Claim 26 recites a method for producing an SiO₂ blank comprising forming SiO₂ particles in a burner flame associated with a deposition burner and depositing the particles under the effect of an electrical field on a deposition surface of a carrier rotating about a longitudinal axis. The deposition burner is supported for relative longitudinal reciprocation with respect to the developing blank between turn-around points thereon. The electrical field varies the shape of the burner flame dependent upon relative location of the deposition burner relative to the blank. A plurality of longitudinally spaced deposition burners are used that each have a burner flame, and that are reciprocated in a predetermined sequence of movement in synchronism along the developing blank between turn-around points. The shape of the respective burner flames is changed in synchronism by the electrical field dependent upon location of said deposition burners during the sequence of movement. A plurality of electrical fields are associated with said burner flames and are varied in synchronism in a change cycle correlated with the sequence of movement of the deposition burners.

WO 98/03441 describes a method for producing an SiO₂ blank by depositing particles under the effect of an electrical field on a rotating carrier. In the normal mode, the electrical field remains unchanged during the entire deposition process. There is one exception, described at page 11 of the translation, that it may be advantageous to create electrical arcs at

certain times to avoid noticeable charging of the green body, which creates electrically “rejecting forces”, which is presumably due to deposition of electrostatically charged SiO₂ particles. The voltage of the electrical field is periodically increased to produce an arc, which is said to discharge the charge on the green body.

In contrast, the claimed method provides for a plurality of electrical fields that are varied in synchronism in a change cycle correlated with the sequence of movement of the deposition burners. In contrast, the WO 98/03441 reference shows only a single electrical field, which is presumably adequate for the arc discharge that it teaches, and also the variation of the electrical field voltage is dependent not on position of the burners, but on other parameters, i.e., the type and height [sic] of the applied voltage, the diameter of the green body, and the deposition rate. See reference translation, page 11, lines 12 to 15. The reference therefore fails to show or suggest a method as recited in claim 26, and reconsideration of the rejection is respectfully requested.

Claims 19 to 21 and 30 depend from claim 26, and therefore distinguish therewith over the prior art.

New independent claim 40 has also been added by the present amendment. Claim 40 recites a method using a plurality of burners and a plurality of electrical fields, which are varied in synchronism in a change cycle correlated with the sequence of movement of the deposition burners so that the shapes of the burner flames are changed in synchronism by the electrical fields dependent upon location of the deposition burners relative to the blank during the sequence of movement.

For reasons similar to those set out above with respect to claim 26, claim 40

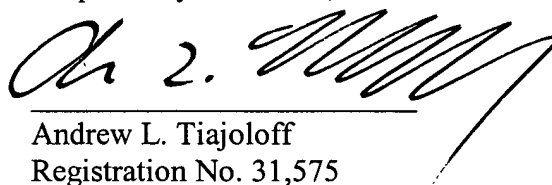
distinguishes over WO 98/03441 and the other prior art.

New dependent claims 41 to 47 depend from claim 40, and therefore distinguish therewith over the prior art.

All claims herein having been shown to distinguish over the prior art in structure, function and result, formal allowance is respectfully requested.

Should any questions arise, the Examiner is invited to telephone attorney for applicants at 212-490-3285.

Respectfully submitted,



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